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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,929	12/30/2003	Hung Chow	MCHK/147/US	1941

2543 7590 06/13/2006

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HARTFORD, CT 06103

EXAMINER
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CHIN, RANDALL E

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/748,929

Applicant(s)

CHOW

Examiner

Randall Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

On p. 5, lines 26-27, the recitation "a straight longitudinal strip 18 having a remote edge at the same or similar radial offset" is awkwardly written and does not make sense.

Appropriate correction is required.

### ***Claim Objections***

2. Claims 9 and 13 are objected to because of the following informalities:

Claim 9, line 2, "strip" should read --strips--.

Claim 13 depends on itself which is improper.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 10, 11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Beach 1,849,218 (hereinafter Beach).

The patent to Beach discloses a motorized floor sweeper comprising a frame or chassis 4, a pair of elongate brushes 1, 2 mounted to the chassis in parallel relationship with one another, an electric motor 5 mounted to the chassis and causing counter-rotation of one of the brushes with respect to the other brush (see arrows in Fig. 2), and a dust compartment 20 (Fig. 2) adjacent to at least one of the brushes for receiving dust swept up thereby.

As for claim 10, there is a pair of said dust compartments 20, 20, one adjacent to each brush and a deflection surface (i.e., curved tip edge in Fig. 2) adjacent to each brush and positioned proximate a respective said dust compartment to deflect dust swept up by the brush into that dust compartment.

As for claim 11, the deflection surface has an "edge strip" (i.e., just the tip edge) defining a minimum spacing between the brushes and a flat swept surface in use.

As for claim 14, there is an sleeve or attachment 36 for an elongate handle 6 attached to the chassis by a multi-pivot joint defined by both pins 29, 29 (Fig. 5).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beach.

With respect to claim 2, providing for a pair of electric motors, one for driving each of the brushes is deemed an obvious modification to one of ordinary skill in the art if one were to spare the expense of providing two such motors. Also, a duplication of parts (i.e., motors) is deemed well within the level of ordinary skill for adding power to the floor sweeper.

As for claim 3, Beach's motor (and as modified, the motors) is positioned between the rollers.

As for claim 4, providing one of the motors situated adjacent to one end of the brushes and the other motor situated adjacent to the other end of the brushes is also deemed within the level of ordinary skill if desired to provide for a stabilized weight distribution.

As for claim 5, there is a "compartment" between the brushes. Note, no "battery" has ever been positively recited here, just a "compartment."

As for claim 6, whether gears or belts are used in Beach would be well within the level of ordinary skill as a drive belt or gear arrangement are deemed mere functional equivalents of each other for driving respective brushes.

7. Claims 1, 7, 8, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beach in view of Morris 3,602,932 (hereinafter Morris).

The patent to Beach discloses all of the recited subject matter as set forth above with the exception of floor-engaging rollers attached to the chassis and maintaining each brush at a defined spacing above a flat swept surface in use. Morris teaches a

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floor sweeper comprising floor-engaging rollers 14, 14 (Fig. 2) attached to the chassis and maintaining each brush at a defined spacing above a flat swept surface in use (such defined spacing would depend on the length or height of the carpet fibers). It would have been obvious to one of ordinary skill in the art to have provided Beach's sweeper with floor-engaging rollers attached to the chassis and maintaining each brush at a defined spacing above a flat swept surface in use as taught by Morris in order to add stability and support to the sweeper while moving across a carpet.

As for claim 8, the rollers would be located inboard of the brushes as taught by Morris.

As for claim 9, Beach teaches a pair of buffer strips or bumpers 11 (see cross section of bumper 11) upon the chassis outboard of the brushes defining a minimum spacing between the brushes and a flat swept surface in use.

As well as claim 12 is understood, each brush has a plurality of bristles extending radially therefrom and wherein the bristles have tips that reach a flat swept surface if one of the buffer strips engages the flat swept surface in use. Note, the location of the buffer strips have not been precisely located in the claim.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beach in view of Kobayashi 4,646,380 (hereinafter Kobayashi).

It has been assumed claim 13 depends on claim 1 (see claim objection above). The patent to Beach discloses all of the recited subject matter as set forth above with the exception of each brush comprising a radially extending strip extending radially as

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far as the tips of the bristles. The patent to Kobayashi discloses in Fig. 3 a brush comprising a radially extending strip 21 extending radially as far as the tips of the projections or bristles 22. It would have been obvious to one of ordinary skill in the art to have modified Beach's brush such that each brush comprising a radially extending strip extending radially as far as the tips of the bristles as taught by Kobayashi for the purpose of improving the cleaning ability of the brush when sweeping a carpet.

### ***Conclusion***

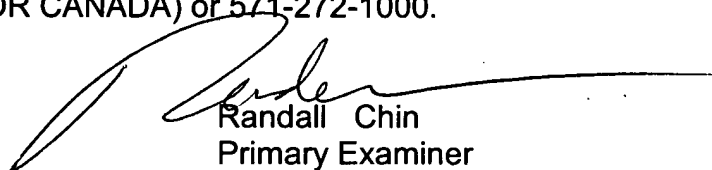
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Drew, Mayer, Bienek, Rosendall, Nordeen, McDowell, and Kaulig are relevant to various carpet sweeper arrangements.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Randall Chin  
Primary Examiner  
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